

ALIGNMENT OF NOTCH HOMOLOGS

	POTENTIAL SIGNAL CLEAVAGE SITE →	Egf Reports	
human2	MP-----	ALRAL LVALLALVLC CA-----APA HA	113
human1	MP-----	PL LAPLLCLALL PA-----LAA RG	109
XenN	MD-----	RIGLAVLLCS LP-----VLT QG	109
DrosN	MDSRSRRRS RAPNTVCTV INKHAVASL PASLPIILLT LAFANLPNTV RGTITALVAA SCTSYG--CD NGGTCVTQLN GKTYCACDSH YGDYCEHRN PCN-SRRCN GGTCDVTFN GRPGISCKCP LGFTIESLCEI AVPMAC-DHV		146
human2	PCNLGGTCHH LSRDI-YECT CGVGTGKEC QVTDACLSP CANGSTCTTV --ANQFSKVC LTFGTGKCE TYNEC-DIP GHCHGGTCL NLPESVQDC PQGTGTCYD SLVPCAPSP CVMGGTCROT GDTFECNL PGEESTGER		259
human1	PCRNGGTCL LI-LEYKCR CPPGNSGKSC QBADPCASNP CANGGGLPF --EASYTIC PPSTHPTCR QVNECCQKP RLCHGGTCH NEVGSVRCV RATHTEPNC RPYVPCSPSP CVMGGTCROT GDTHECACL PGFTGANCEE		256
XenN	PCRNGGTCEL LNSVTEYKCR CPPGNTGDSK QBADPCASNP CANGGKCLPF --EIQYICAC PPFTHGATCK QDINEC-S-Q NPCKNGGQCI NEFESVRCIC QNRFTGQNC EPVVPKPSP CLNGGTCTROT DDTSYDCTCL PGFSGQANCEE		255
DrosN	TCLNGGTCL KT-LEETICA CANGYTGERC ETKNLCASSP CRNGATCTAL AGSSSTTCSL PPFTTGITCS YDIEEC-Q-S NPCKYGGTICY NTHGSVQCH PTGYTGKCD TKYNPCSPSP CVMAGTCRSH G-LSYECKCP KGTGKNCED		292
human2	NIDDCPNHRC QNGGCVQDGV NTVNCRPPQ VTGQCTEDV DECLLPNA- CONGGTCANR NGGVCVQV QNSDDCSEN IDICAFASCT PGSTCDRVA SFSQCPKQK AGLCHLDDA CTSNPCHKA LCDNPLNGQ YICTCPGQYK		408
human1	NIDDCPNHC KNGACVQDGV NTVNCRPPE VTGQCTEDV DECOLHPNA- CONGGTCHNT HGGVCVQV QVTGDCSEN IDICASAACF HGATCHRVA SFYCEPHQR TOLLCHLDDA CTSNPCHES NCDTNPNKG AICTCPSTYT		405
XenN	NIDDCPSNHC RNGGTCVQDGV NTVNCRPPD VTGQCTEDV DECOLHPNA- CONGGTCHNT YGGVCVQV QVTGDCSEN IDICANAACH SGATCHRVA SFYCEPHQR TOLLCHLDDA CTSNPCHES NEDTNPNKG AICTCPSTYT		404
DrosN	NYDDCLGLC QNGGTC DGI SDYTCRPPN FTGRFCDDIV DECAQRHPV CONGATCTMT HGSVSCVQV GHAOLDSEN TDDCKQAACF YGATCTDGVG SFYQCTKCK TOLLCHLDDA CTSNPCHADA TCTSPINGS YALSCATGCK		442
human2	GADCTEDVIE CAVANSNPE HAGKQNTDQ AFHCECLKY AGPCEHNDIN ECHSDPCOND ATCLDKIGF TOLCHPEKG VHELEINEC QSNPCVNGQ CYDKVAFQC LCPPGTGPV CQDIDIDCSS TPCLNGAKCI DHPNCEYDC		558
human1	GPACSDVIE CSLG-ANPE HAGKINTLG SFECCLQY TGPRCEIDV ECYSNPCOND ATCLDQIGF QCHMPQYEG VHEVNTDEC ASSPCLHQR CLDKINEFQC ECPGTGHL CQYDVDECAS TPCKNGAKCL DQNTYTCVC		554
XenN	GPACNDVIE CSLG-ANPE HGGRCINTLG SFQNCPCQY AGPCEIDV ECLSNPCOND STCLDQIGF QCTCHPQYEG LYCEINIDEC ASNPCLHQR CLDKINEFQC DCPGTGSQL CQHDFDECTS TPCKNGAKCL DQPNSTYDC		553
DrosN	GVDSCSDIE CQCG--SPCE HNGICVNTPG SYRNCSDGF TGPRCEININ ECESHPQNE GSCLDQGT REVCHPQGTG TQCEIDIDEC QSNPLNDGT CHQKINGKC SCALGTGAR CQDINDIDCOS QPCKNGTCH DSIAGTSCC		590
human2	ATGFTGVLCE ENINDCDIP CHHGQDDGI DSYTCINPG YNGALCSDOI DECVSSPCLN DGRCTDLVNG YQNCPPGTS GVANCEINFDD CASNPCIHG- TCHINGTRYS CYCSPGTGB RCHNIDIDCA SNPKRGATC INGVNGFRCI		707
human1	TEGTYGTHCE VQIDECIDIP CHYGSCKQGV ATFTCLCRPG YTGHHCTINI NESSQPERL RGTCDPINA YLFCCLKGTI GPNCEINLDD CASSPCISG- TCLKIDGVE CACEPGYTES HCKNSVIDCA QNPCHNGTIC EDGNGFTCR		703
XenN	TEGFTGRHCE QDINECIPDP CHYGTCKDGI ATFTCLCRPG YTGRLCNDI NECLSKPCLN GGGCTBRENG YICTCPKGTI GVANCEIKTDD CASNLCDNG- KCTDKIDGVE CICEPGYTK LCNININECD SNPKRGATC KQDNGFTCY		702
DrosN	PPGTYGTSCIE ININDCSDIP CHQKCIDIV NSFKCLCRPG YTGVTCKDQI NECESNPCE DGHCDRVS YQCDQAGTS GKUCEVWNE CHSNPCNQA TCTDGTNSKY CQCVPGTGB HCKNVIDCI SSPCANNGVC IDDVNGYKCE		740

FIG.2A

humN2	CPCEPHHPC	YSWNECLSN	PCI-HGNCIG	GLSOKYKCLD	AGVINGINEV	IRNECLSNPC	GNIGTCINLV	NGYRICKKAG	FKYNGICVNI	DECASWPCLN	GGTCEDDISG	YTCICVLPYT	GKNDITVLP	CSPNPCEWNA	VCKESPFAES	856		
humN1	CPCEGHPIC	LSEWNECLSN	PCV-HGACDD	SLNGYKCDOD	PGWSTGNCID	NNNECSNPC	WNGTCKONT	SGIVCTOREG	FSPNCDINI	NECASWPCLN	KGTCIDIVAG	YKCNLLPYT	GATCEVLP	CAPSPERNGG	ECROSEDIYES	852		
XenN	CPDGYHJHC	LSEWNECLSN	PCI-HGACDD	GVNGYKCDCE	AGUSGNCID	NNNECSNPC	WNGTCKONT	GATYCTCKAG	FSPNCDINI	NECSSWPCLN	HGTCIDIVAG	YKCNLLPYT	GATCEVLP	CALSPCKNUGG	RCKESEDJET	851		
DrosN	CPREFYDHC	LSWDECLSN	PCVNEURCED	GINEFTCHP	PYTGKREEL	DIDECSSNPC	GHGCTCYKL	MAFSCKDPPG	YTGKCEINI	DIDCTNPPCH	GGTCIDIVAG	YKCNLLPYT	GRDCEWHP	CASNRCKNEA	KCTPSSWFLD	890		
humN2	YTCLCA-POV	QGORCTTID	EC-ISKPCN	HLCHNTGCS	YNECEPPGFS	GHDEEDTID	CLANPCNNG	SCMGNTIFS	CLCLPGFTD	KCDTIDNECL	SEPCXNGGTC	SDYVNSYTC	CDHFGDVC	ENINNETES	SCFNGGTCVD	1004		
humN1	FSCVPTAGA	KGOTEEVON	EC-VLSPCH	GASCONTHG	YRCHDAGYS	GRNCEITID	CRPNPHNGG	SETGINTAF	CDCLPGFRT	FOEDINECA	SUPPCRNAGC	TDCVSYTCT	CPAFSGIHC	ENWIPDCTES	SCFNGGTCVD	1001		
XenN	FSCCEP-POV	QGOTCEIDNN	EC-WRPPCH	GATCONTNG	YKCNKPGYT	GRNCEHID	CDPNPCNNGG	SCSDGINWF	CNCPAGFRCP	KCEDINECA	SUPPCRNAGC	TDCVNSYTC	CDPFGSIHC	ESNTPDCTES	SCFNGGTCID	999		
DrosN	FSTCK-LGY	TRYCEDTID	ECSSSPCH	GASCLNPGS	YRCLCTKGYE	GRDCAINTID	CASPCHNGG	TCLDGLDYS	CLCVDFDCK	HCEIDINECL	SUPPCRNAGC	SDYVNSYTC	CPLGFSGIC	GTNDECTES	SCDNGGSCID	1039		
humN2	GINSFCLCP	VGFTEGSLH	EINECSSHPC	LNEGTCVDQ	GYRCSCLP	YTGNCOTLV	NLCRSSPCN	KGTCVKKAE	SOCLCPSGVA	GAYCDIPNVS	CDIAASPRGV	LVEHLCHSG	VCIMAGNTHY	CDCEPLGYTGS	YCEQLDECA	1154		
humN1	GINFTCLCP	PGFTGSCYCH	VINECDSPC	LLGOTCDBR	GLHRTCPDG	YTGNCOTLV	HNECDSPCN	GGKCHTHTD	YRCEPSSGT	GLYCDIPSVS	CEVAARQGV	DIVARLCHGG	LCVDAIGNTH	CRCDAGYTG	YCEDLVDECS	1151		
XenN	GINFTCLCP	PGFTGSCYCH	DINECDSPC	LNGGTCDBS	GYKCTCPDG	YTGNCOTLV	RWCDSPCN	GGKCHTHTD	YRCECKSGT	GAYCDIPSVS	CEVAARQGV	DIVARLCHSG	NCVDTGNTH	CRCDAGYTG	YCEQVDECS	1149		
DrosN	GINGYNCSL	AGYSGANDY	KLNKCDSPC	LNGATCHEON	NEYTHCPDG	FTGKCEYV	DWGDSPCN	GATCSOKHD	FCKCSAGHT	GKLDVOTIS	CDIAADKQL	SLRCL-NG	TCKDYGNSHV	CYCSOGYAGS	YCKEIDECO	1188		
humN2	SNPCDHGATC	SDFEGYRCE	CHPYGYNIC	EYEVDECON	PCONGGTCID	LWNFKCSCP	PGTRGLLEE	NIDDCAR	-----	GFHCLN	GGCHURITGG	YSRCLPGA	GERCEGNE	CLSNPSCSEG	SLDCLIND	YLCVCRSAFT	1297	
humN1	PSPCONGATC	TDYLGYSCK	CVAGYHGNIC	SEEIDELSH	PCONGGTCID	LPNTYKSCP	RGTOGHVCEI	NWDDCHPPVD	PVSRSPKCN	NGTCVDNUGG	YSCTOPPGV	GERCEGNE	CLSNPCDARG	TONGVORVND	FHCECRAGHT	1301		
XenN	PNPONGATC	TDYLGYSCE	CVAGYHGNIC	SEEIDELSH	PCONGGTCID	LINTYKSCP	RGTOGHVCEI	NWDDCTPFYD	SFTLEPKCN	NGKIDIRVGG	YNICPPPGV	GERCEGNE	CLSNPCDSRG	TONCLQVND	YRCECRGFT	1299		
DrosN	SUPPCONGGTC	RULIGAYECO	CRDGFEGONC	ELNIDDCAPN	PCONGGTCID	RYWNTSCSCP	PGTWGTHCEI	NKDDCKP	-----	GACHN	NGSCLIRVGG	FECVCPPGV	GERCEGNE	CLSNPSCNAG	TLDVCLVNN	YHCHORPCHN	1330	
humN2	GRHCEITVID	CPOMPCLNG	TCAVASNPD	GFICRPPGF	SGARCS	---	SGGWKCRKG	EDCVHTAS	---	GRPCTPSP	---	RUES	---	GC-ASSPCD	HGGSCHPORO	PPVYSOCAP	PFSGSRCEL	1422
humN1	GRCEESVING	CKGKPCNNG	TCAVASNTAR	GFICKCPAGF	EGATENDAR	TGCSRLCNG	GTCISUPR	---	SPITCLCPGF	TGPECPFPAS	SPFLGNPCY	NBGTCEPTE	SPFYRLCPA	KFNALLCHIL	DYSFG	---	GAGRIDPPP	1444
XenN	GRCEESVING	CKGKPCNNG	TCAVASNTAR	GFICKCPAGF	EGATENDAR	TGCSRLCNG	GTCISVLT	---	SSKVCESGY	TGATCPPIV	SPC-ASHPCY	NGGTGCFAE	EPFTGCFCK	NFNGLECHIL	DYEPFG	---	GLGKNTIPP	1441
DrosN	GRHCEKVID	CADSPCHNG	NCN	---	RDS	GHICLONNG	YKCNELSGO	DEDSNPRVG	-NCWADLGF	GYRCECPGT	LGHECEIDTL	DEC-SPNCPA	QGAACEILLG	D--YECLEPS	KUKGRCDY	DANTPCWNGG	SGSGNDRYAA	1473

FIG.2B

Lin-12/NOTCH REPEATS

humN2	---A---	DEL	SOVCAIKARD	GVCIEACNSH	ACGVIGGDCS	LTHNPVANC	SSPLPCVDYI	NI-QDELCH	TVECLDNFE	CGGNSKTK-	-YDKYCAIH	KDNHCNCGN	SECGVIGELD	CAADPEN-L	AEGTLVIVL	HPPEQLLODA	1562
humN1	LIE---	ACE	LPECEADGN	KVCSLCNNH	ACGVIGGDCS	LNFNDRPKNC	TQSLQCWKYF	STGHGDSQCN	SAGCLDGGD	CDRAEGGCP	LYDYCKQHF	STGHGDSQCN	SAECEVIGELD	CAEAPER-L	AAGTL-VVVV	LPPPEQLONS	1589
XenN	DNDD---	ICE	NEOCSELAIN	KVCNANCNNH	ACGVIGGDCS	LNFNDRPKNC	TQSLQCWKYF	NDGKCDSQCN	NTGCLYDGD	CDKVEVQCNP	LYDYCKQHF	QDGHGDSQCN	NAECEVIGELD	C-ANPEN-L	AEGTLVIVL	HPPELKNONS	1586
DrosN	DLEQRAND	KRGCTEKQCN	GICDSQNTY	ACNFIDGDCS	LGT-NPVANC	TAN-ECVNF	KNGKCNNECN	MACHYDGHG	CERKLSCDS	LFDAYCKGHY	GDFGCDYGCN	NAECVIGELD	CENKIDSPVL	ALGANSYVNL	MNVEAFREIQ		1621
humN2	R-SFLRALGT	LLHNLRLIKR	DSGELHWYP	YGEKSAANK	KD--R-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	TH
humN1	SFHLRELNR	VLHNVVFKR	DAHGGQHFP	YGRDEELRK	HPKRAEGV	AAPDALLGV	KASLLPGSE	GGRRELIP	MDVRGSIVL	EIDNRQCVDA	SSQFQSATO	VAAFGLGALS	LGSI-NIPYK	IEAVQSEIVE	PPPPAQ-HF		1680
XenN	V-NFLRELNR	VLHNVVFKK	DSKGEYKTYP	YGNMEELKK	HHIKRSTDYV	SDAPSAL---	-FSTHKESTL	LGRHRELDE	MEVRGSIVL	EIDNRQCVKS	SSQFQSATO	VAAFGLGALS	LGSLDLSYK	IEAVKSENNE	TPKPSI-LYP		1730
DrosN	A-QFLRWSH	MLRTTVRLCK	DALGHDIIN	VKNVRVPRI	EDTIFARNK	ILYQQVHQ-	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1745
humN2	LLAVAVTIL	FTILLGVHA	KRKRK--HCS	LVLPEGTLR	RDAENKRE	PVGDAVGLK	NLSVQVSEAN	LIGITSEHV	VQDE-----	-----	-----	-----	-----	-----	-----	-----	1812
humN1	MYVAAAFAV	LFTYGGCVL	SKRRRRHGG	LWPEGKY-	SEASKKRE	ELGDSVGLK	PLK-NASDGA	LMDNNE-N	QDEJ-----	-----	-----	-----	-----	-----	-----	-----	1866
XenN	MLSHLVPLL	ITFVFHVVIV	NKKRRRHDS	FGSPALFK	NPA-KRNGET	PV-EDSVGLK	PTK-NHTDGS	FHDNNE-N	QDEET-----	-----	-----	-----	-----	-----	-----	-----	1860
DrosN	VITGILLVII	ALAFFGHVL-	STORKRHGV	TWPEGFRAP	AAVSRRRRD	PHGGRHNLN	KOVANSGGV	GQPCAH-V	SDDESIMPLP	HRKSDPVSG	VELGNNGGYA	SDHTWSEYE	EADNRVWSDA	HLDDVIV-R	ATM--TPP-A	1886	
humN	EDEVVLDVN	VRGPDGCTPL	HLASLRGSS	DLSDIEDAE	DSSANTITDL	VYGCASLDQ	TDRTGEWALH	LAARYSADA	AKRLDAGAD	ANADNNGRC	PLHAAVAADA	GVFQILIRN	RYTLDARHN	DGTTPLILAA	RLAVEGWAE	1962	
TAN-I	EVDADCHVN	VRGPDGCTPL	HLASLRGSS	ETGNSEEE-E	DAPA-VISDF	TYGCASLHND	TDRTGETALH	LAARYSSDA	AKRLLEASAD	ANIDNNGRT	PLHAANSADA	GVFQILIRN	RATLDARHN	DGTTPLILAA	RLAVEGWLED	2014	
XenN	EIEADCHVN	VRGPDGCTPL	HLASLRGSS	ETGNSEEE-E	DASANNISDF	IGGGAQLHND	TDRTGETALH	LAARYARADA	AKRLLESSAD	ANVDNNGRT	PLHAAVAADA	GVFQILIRN	RATLDARHF	DGTTPLILAA	RLAVEGWLEE	2009	
DrosN	HQDGGKHVD	ARCPGCTPL	HLAARVRGG	DTGEDJENNE	DSTAQVTSUL	LAQGAELNAT	MUKTGETSLH	LAARFARADA	AKRLDAGAD	ANCDNNGRT	PLHAAVAADA	MGVFQILIRN	RATNLNARHH	DGTTPLILAA	RLAIEGWLED	2036	
humN	LINCQADVNA	VDDHGSALH	VAAAVNVVCA	TLLLLKNGAN	RQNDNKEET	PLELAAREGS	YEAKTILLDH	FANDITDHH	DRLPDVARD	RHHHDIVLL	DEYNTPSP	--GTVL--TS	ALSPV-----	-----	-----	ICGP NRSTLSKHT	2097
TAN-I	LINSHADVNA	VDDLKGSALH	VAAAVNVVDA	AVILLKNGAN	KQNDNKEET	PLELAAREGS	YETAKVILLDH	FANDITDHH	DRLPDIADE	RHHHDIVLL	DEYNLRSPQ	LHGAPLGTP	TLSP-----	-----	-----	LCSP NGVLSKPG	2153
XenN	LINAHADVNA	VDEFGKSALH	VAAAVNVVDA	AVILLKNSAN	KQNDNKEET	SLELAAREGS	YETAKVILLDH	YANDITDHH	DRLPDIADE	RHHHDIVLL	DEYNLKSPT	LHNEPLGAT-	TLSP-----	-----	-----	ICSP NGYGNWQPS	2147
DrosN	LITADADVNA	ADNSGKTALH	VAAAVNVVTEA	WILLHHTHAN	RQADNDKEET	PLELAAREGS	YEACKALLDH	FANREITDHH	DRLPDIVASE	RLHHHDIVLL	DE-HWPSQ	MLSWTPQMI	GSPPGGRBP	QLITOPTVIS	AGNGNGNG	2185	

FIG.2C

	NLS	CKH	cde2	cde2		
humN2	PHGKKSRRPS AKSTHPTSLP NLAKAKDAK GSRKKKLSL KVLQSE--SS VTSPVLE SPHTVSDTT SSPH					2169
humN1	VQCKKVRPS SKGLACGS---KEAKULK A-RRKKSDIG KGLLD--SS GMLSPVLSL SPKHLSDVA SPPL					2219
XenN	VDSKKARPS IKNGC---KEAKULK A-RRKKSDIG KTLTDSGS GVLSPVLE STHTLSDS SPPL					2213
DrosN	NASGKSDNOT AKQKAA---KKRQLTE GS-PDNLDA TCSLRKRASS KKTSAASKA ANLNLNPD LIGVSGVPG VPTNSADA AAAAAYVA MSHELESPV GVCHGGLPS PYDTSSWYN ANAAPLNGN PNTGAKDPHS					2327
	BMS					
humN2	-----ITSPGILQAS PNPVL--ATA APPAPVHADH ALFSNLEH Q-----PLAHDASTV LPSVQLLSH HTIVSPGS--GSAGLSRLH PVPVPAIV--MNRHENVETQ					2263
humN1	-----LPSPT--GDS PSVPLNHPG WPDTHLGCH LNVA--KPEH AALGGGRLA FETGPRLSH LPVAGTSTV LGSSGGALN FTVGGSLSLN GDCVLSQLQ SCWPNQVNP LRGSVAPCL					2336
XenN	-----HTSPF--GDS PSWPLNHLTS MPESQLGNH INWAY-KQCH AA--GSNRHA FDNWPRLTH L-WASSPNTI MS---NCSWH FTVGGAFTNH SDCVLLARLD NGWVQNDYDP IRNGIQDGN-					2323
DrosN	YEDLTKNADS WDSLQGNGLD NIKLDNYAYS HESPT--QDE LLNGGGLGN GNGRNOVCP GVLPGCLCN GGLSGAGNCH SHEQLSPPY SNQSPPHSVQ SSLALSPHAY LGSPSPAKSP PSPTSPTTHI QAMRHATQOK QFGGSNLNSL					2475
	CK11					
humN2	YNEWFQWILA PAEG-YHPGJ APQSRPECK-----HITPRE PLPP-IV-TF QLTPKSTAD PAG-----APQDSTC PPVAVGRLPT WQTP-----CH ARL-PSVAF P TAWPQDQDQ VARTILPAYH					2387
humN1	SYQAPSLQHG -HYGLHSSL AASALSDHNS-----YQGLPSTRL ATQPHLVQD QVQPNLQHQ QGNLQPAVQ QQDSLPPPP PPQPHLGVS AASGLGRSF LSGEPSQADV QPLCPSSLAY HTLPQ-ESP ALPTSLPSSL					2474
XenN	ADQADALQHG LMTS-LHNL PATTLSQMT-----YQANPTRL ANQPHLQHQ QHQDQDQ-----LQLHGS HQDQHN-SS TTSHTINSPE CSSDLSQTLQ QDM--SSNWI HSWAPQ-DTQ IFAASLPSNL					2440
DrosN	LGANGGGVY GGGGGGGGV GGGGPNSPVS LGTTSPTGSD MGLNLAPPQS SKNSATHMTI SPQDQDQDQDQ QDQDQDQDQDQ QDCLGLEFG SAGLDLNG-F GCSPTDSTHSG QMWPPS---I GSSNSG-SSP STINLSPSSQ					2625
	PEST-CONTAINING REGION					
humN2	PPPASVGYKP TPSPSHSYAS SNAERTPSH SGHQLGHPY LTPSPESPQD VSSSSPSHA-SDNSDVTSP TPGLGAGGGR GPGTHNSEPP HNNH QVYA					2471
humN1	VPPVTAAGFL TPSPSHSY-S S-PHENTPSH QLWP-EHPF LTPSPESPQD VSSSSPSHNV SDNSEGVSSP PT-----SHQ SQIARLPEAF K					2556
XenN	TQSHHTAGFL TPSPSHSY-S S-PHINTPSH QLWP-DHPF LTPSPESPQD VSSSSPSHNV SDNSEGVSSP PT-----SHQ PQRTHLPEAF K					2523
DrosN	HNDQAFYQVL TPSSDHS-----GGHTPQH LVQTL-D-SY PTPSPSPGH VSSSSPSH-SDNSEGVQSP AANNLYISGG HQANKGSEAI YI					2703

FIG.2D

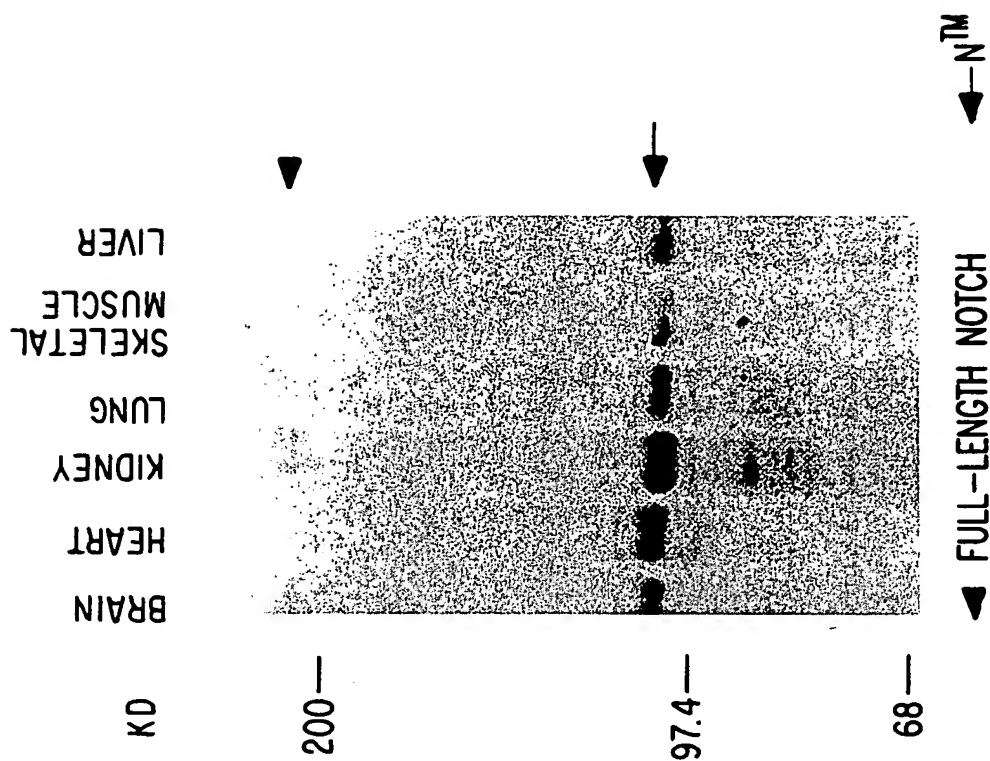


FIG.3B

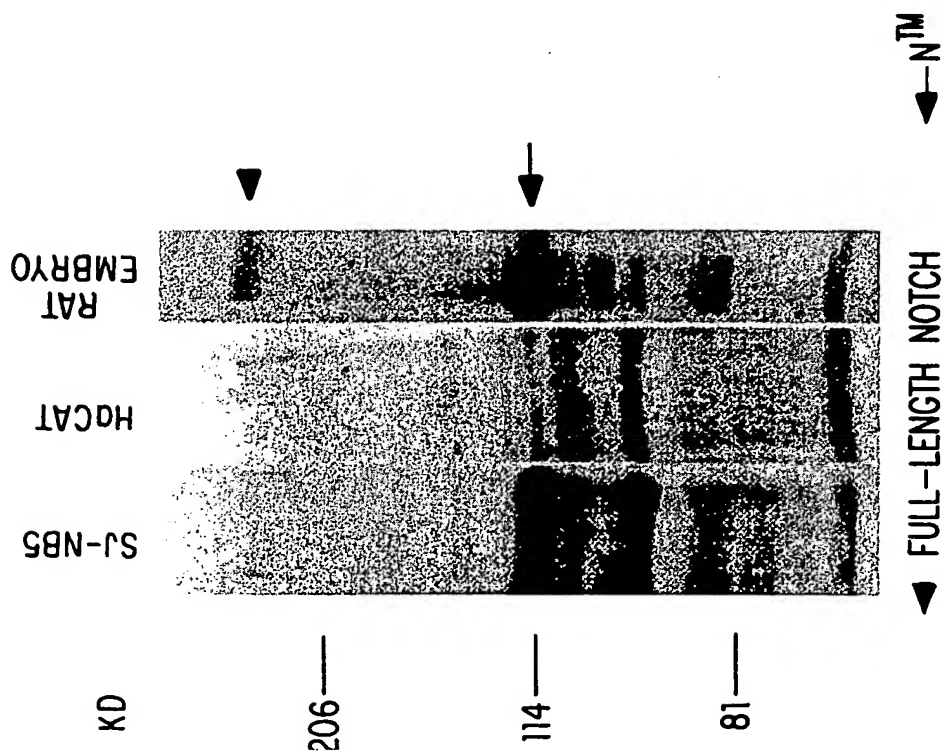


FIG.3A

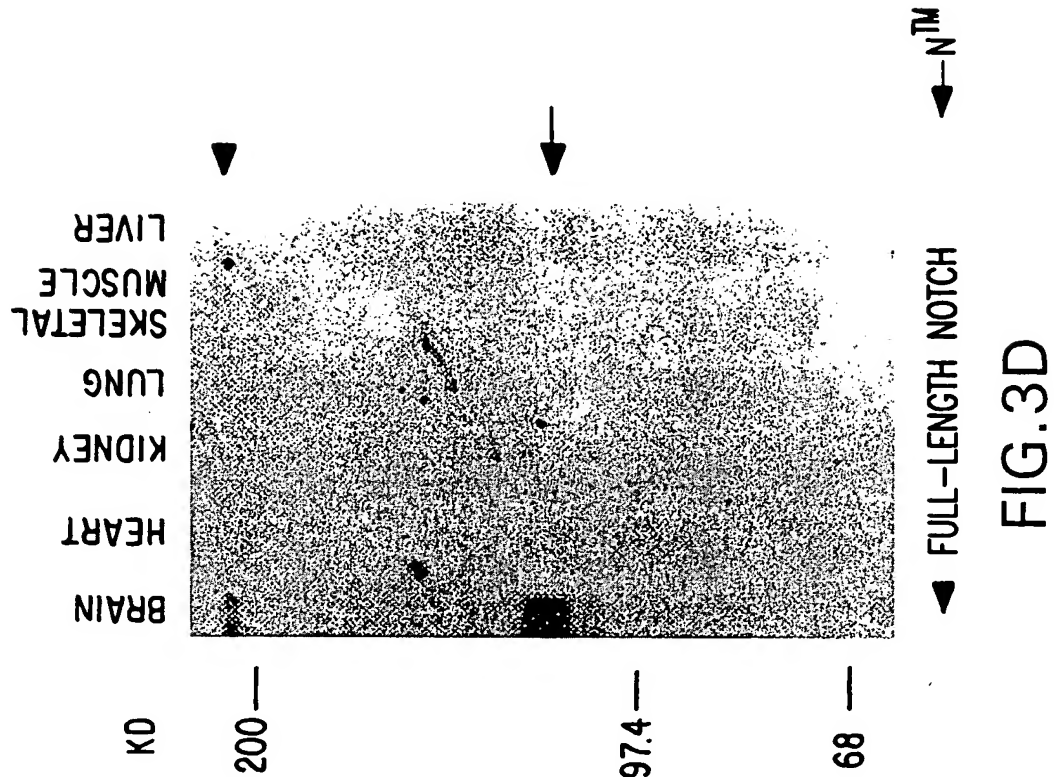


FIG.3D

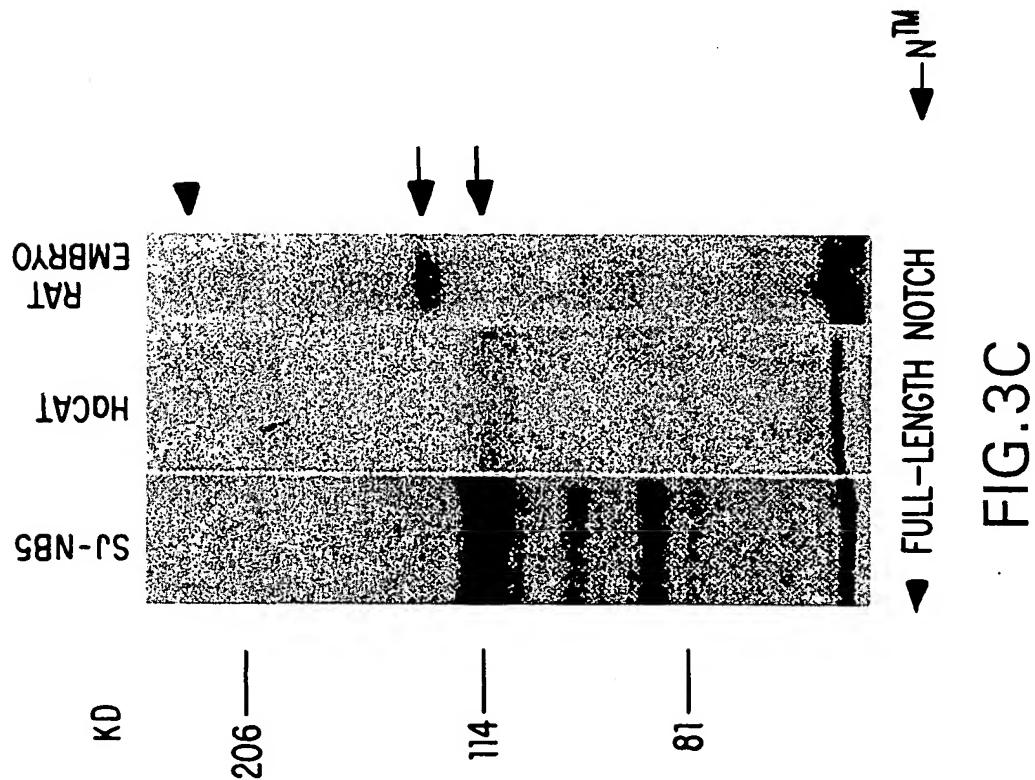


FIG.3C

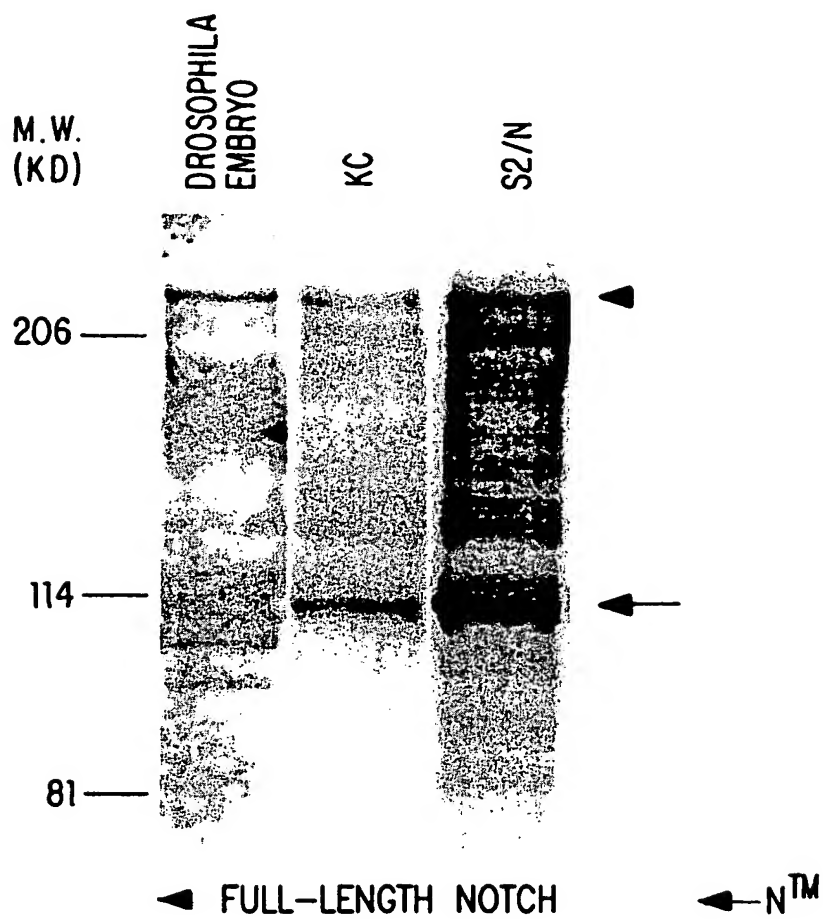


FIG.3E

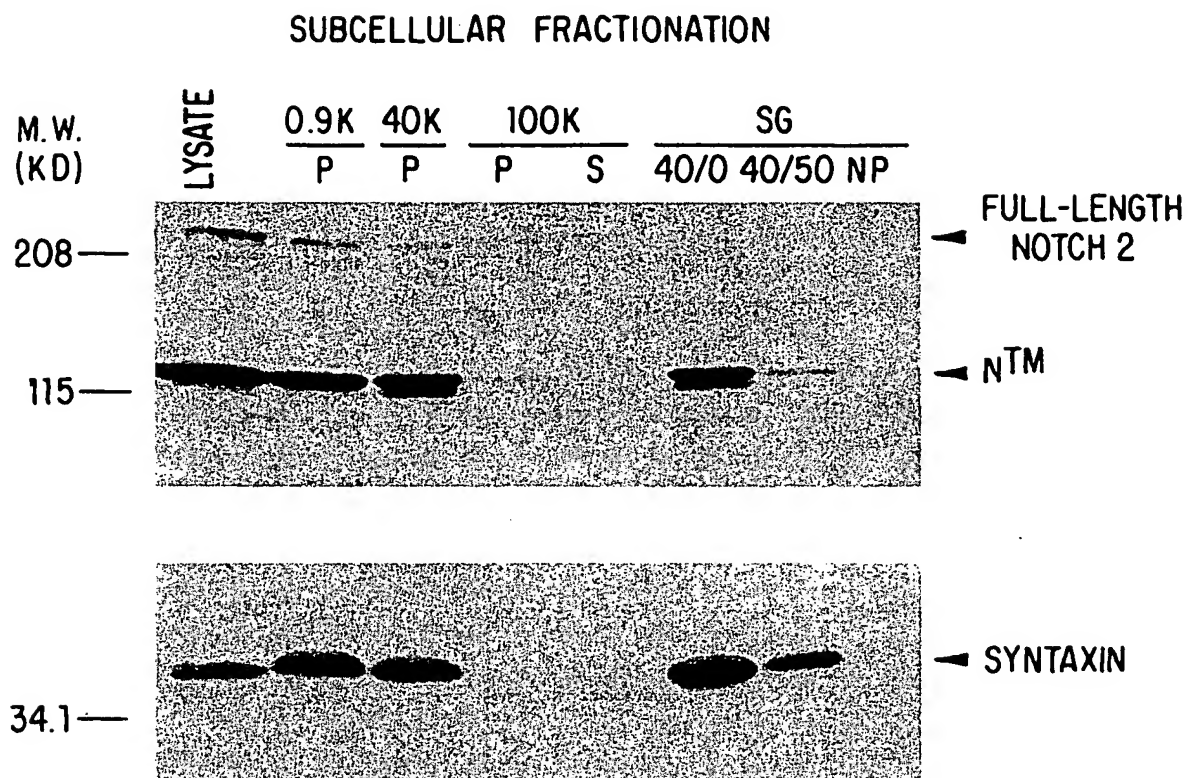


FIG.4

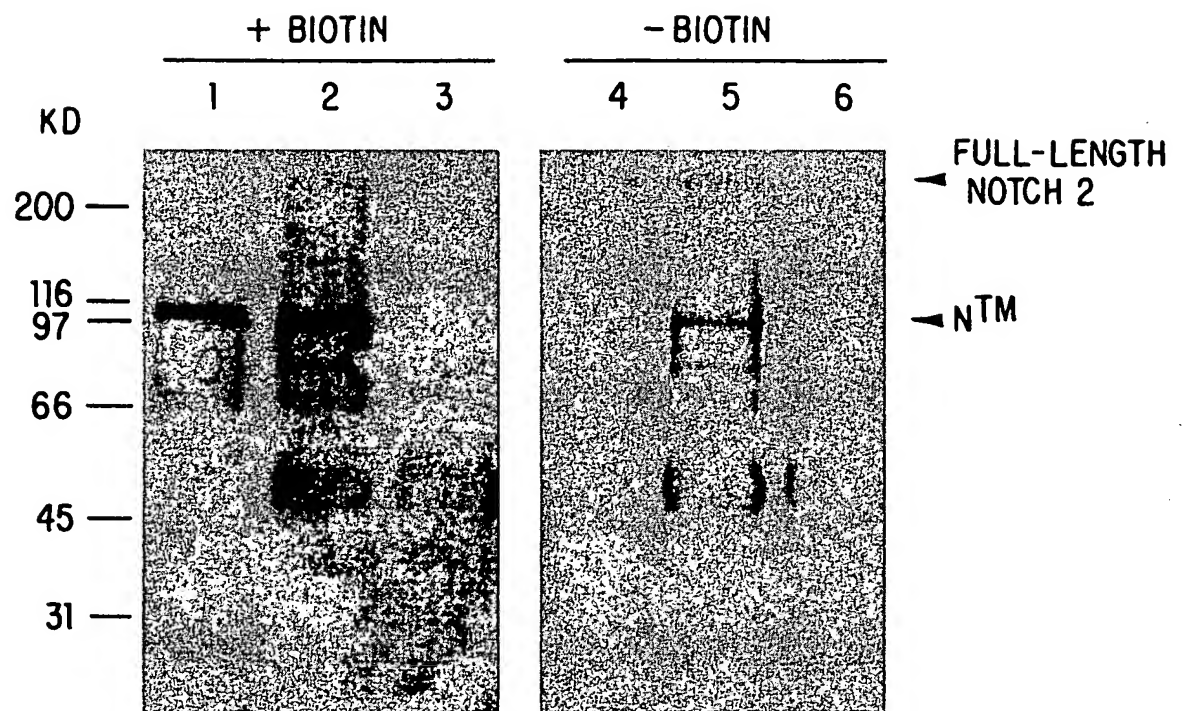


FIG.5

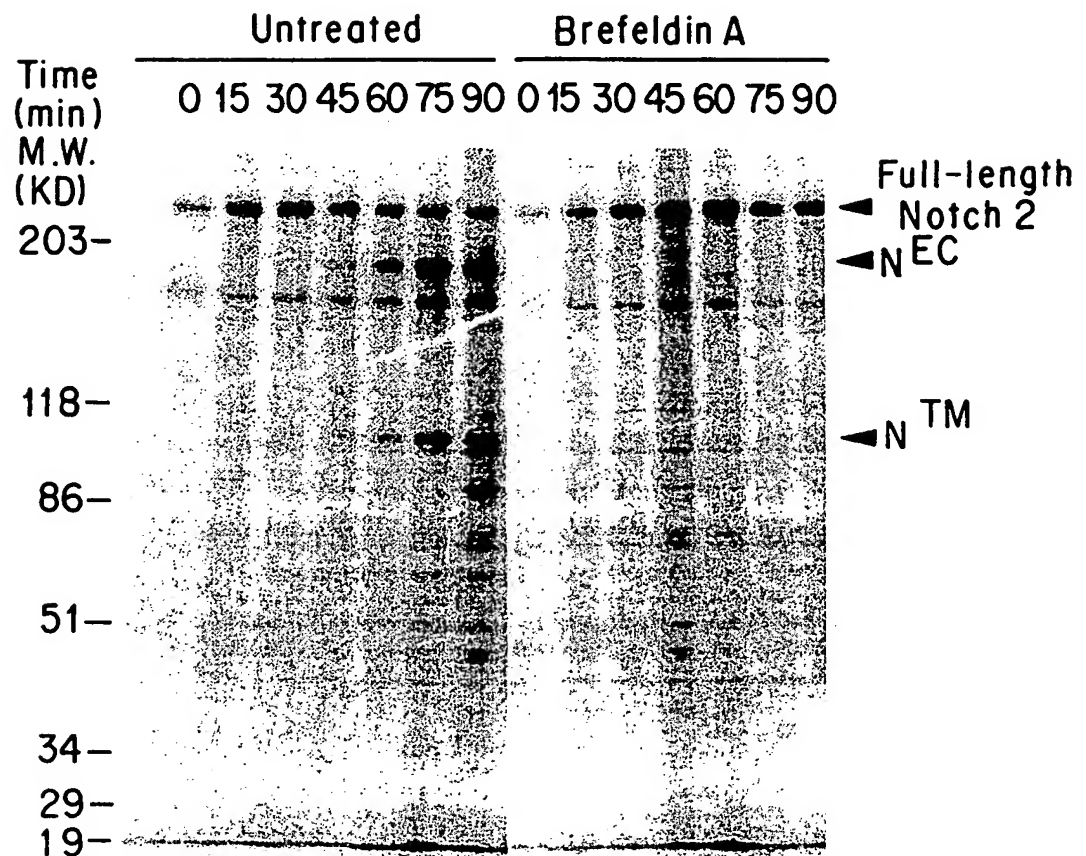


FIG.6A

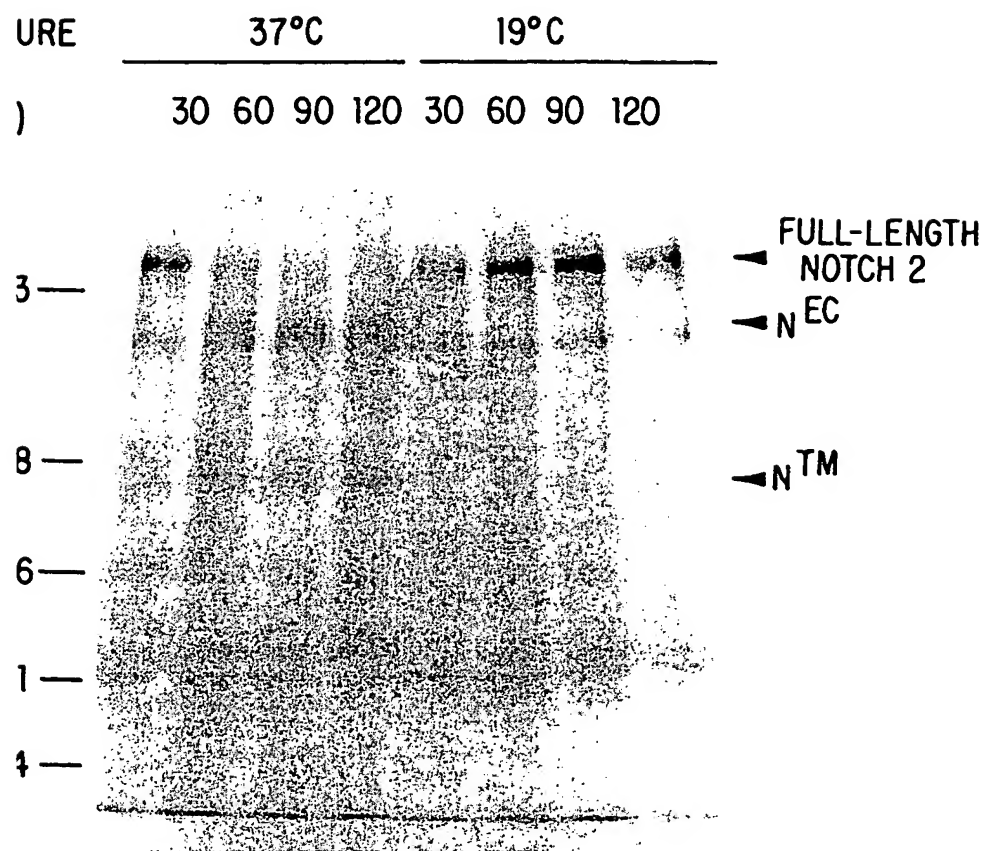


FIG.6B

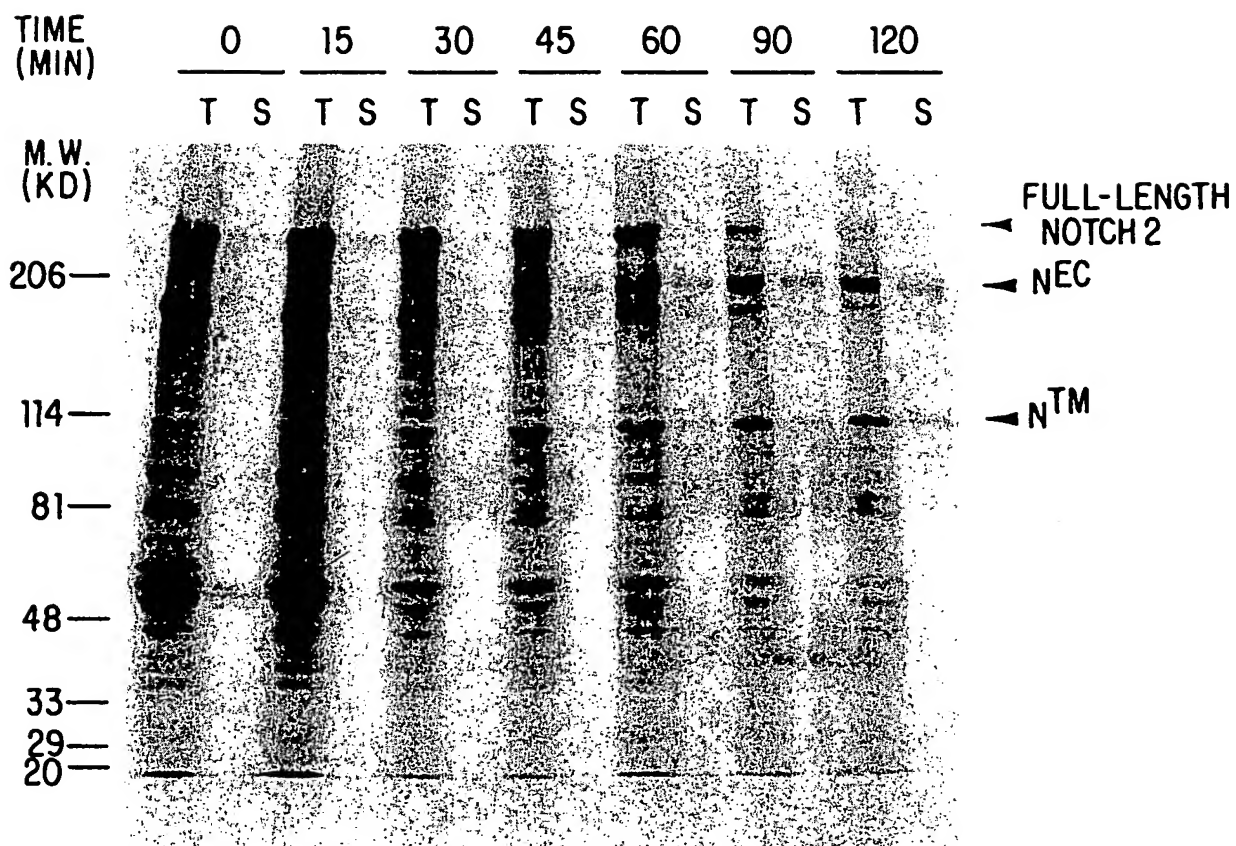


FIG. 7

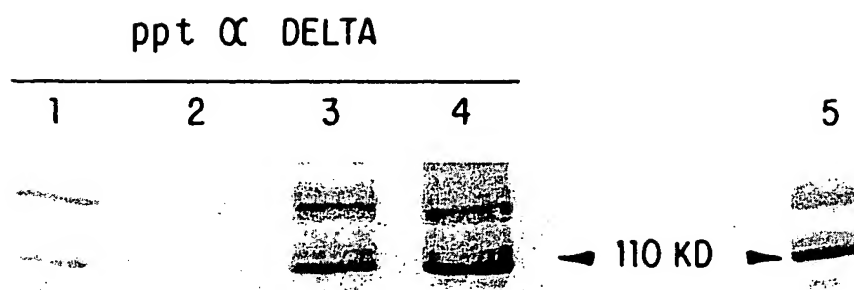


FIG.8

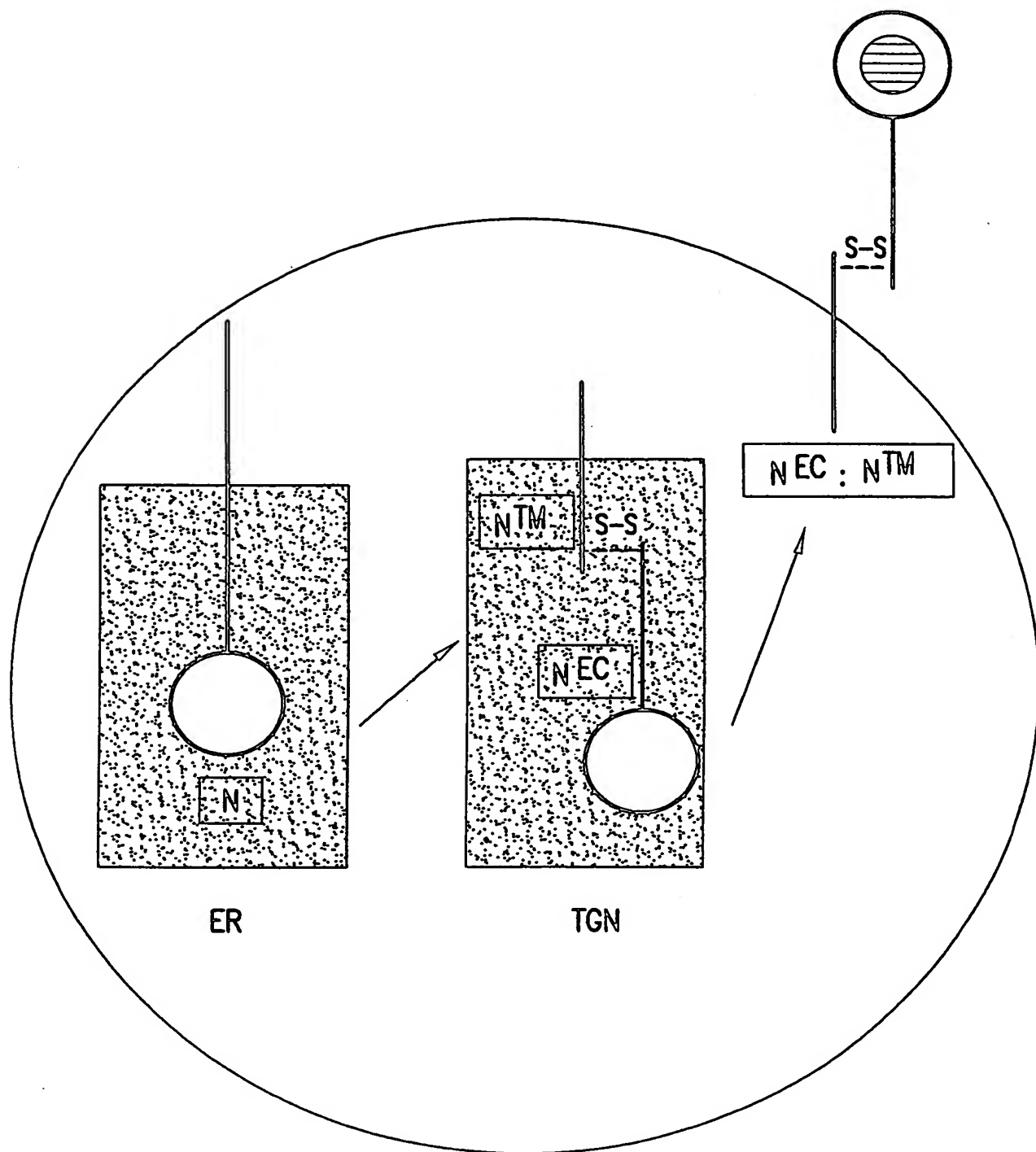


FIG. 9

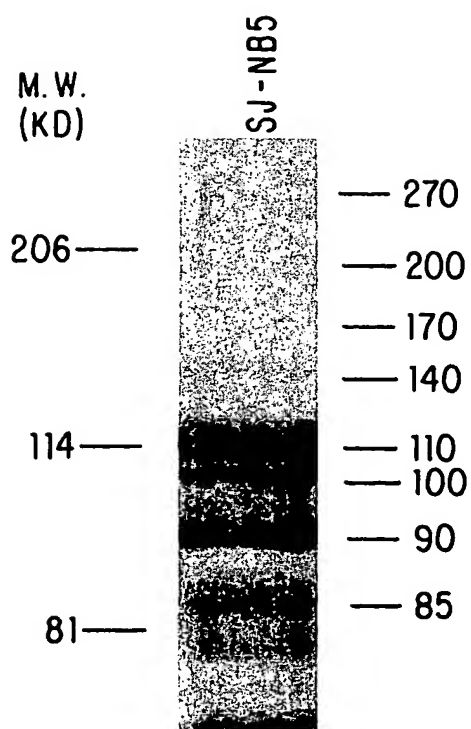


FIG. 10A

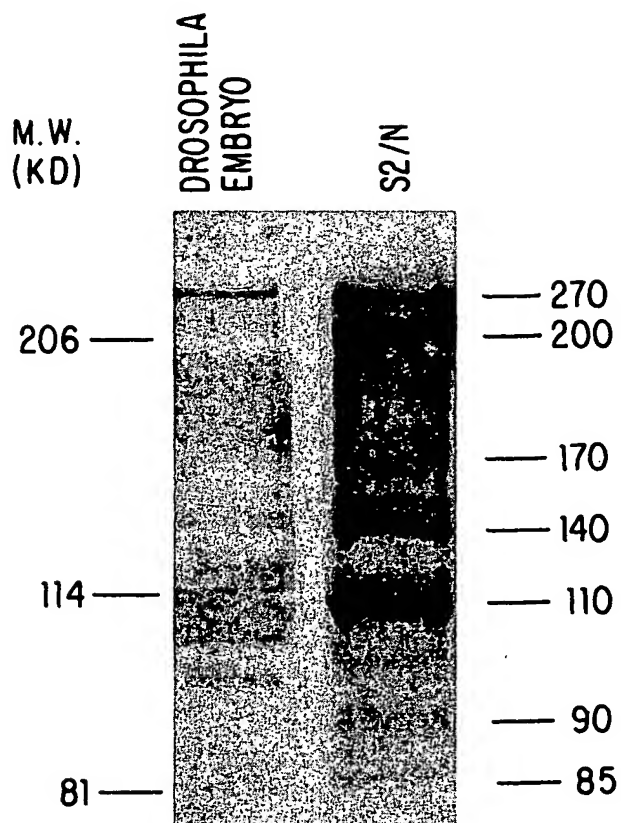


FIG. 10B

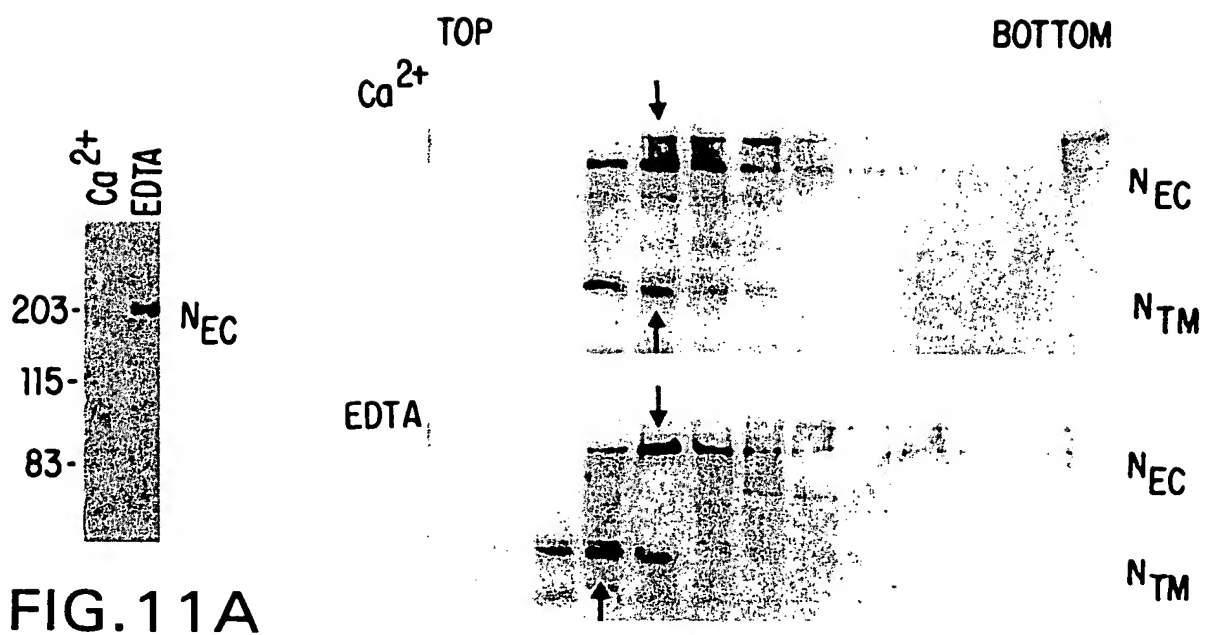


FIG. 11B